Contents

About This Release Notes 5

1 What's New or Changed in OES 2018 SP3 7

1.1 What's New or Changed in OES 2018 SP3 Update 3 . . . 7
1.1.1 Cloud Integrated Storage (CIS) . . . 7
1.2 What's New or Changed in OES 2018 SP3 Update 2 . . . 7
1.2.1 Supported Versions of Bundled Products . . . 7
1.2.2 Cloud Integrated Storage (CIS) . . . 8
1.3 What's New or Changed in OES 2018 SP3 Update 1 . . . 8
1.3.1 iPrint . . . 8
1.3.2 Migration Tool . . . 8
1.3.3 Support Matrix Updates . . . 8
1.4 What's New or Changed in OES 2018 SP3 . . . 8
1.4.1 Install and Upgrade . . . 9
1.4.2 OES Welcome Screen . . . 9
1.4.3 TLS v1.2 Support . . . 9
1.4.4 Product Improvement . . . 10
1.4.5 Cloud Integrated Storage (CIS) - OES Dashboard . . . 10
1.4.6 Common Internet File System (CIFS) . . . 10
1.4.7 Migration Tool . . . 11
1.4.8 NetWare Core Protocol (NCP) . . . 11
1.4.9 Storage Services (NSS) . . . 12
1.4.10 Distributed File Services (DFS) . . . 12
1.4.11 OES File Access Rights Management (NFARM) . . . 12
1.4.12 VLOG . . . 13
1.4.13 iPrint . . . 13
1.4.14 DNS / DHCP . . . 14
1.4.15 Domain Services for Windows (DSfW) . . . 14
1.4.16 OES Cluster Services (NCS) . . . 15
1.4.17 Supported Versions of Bundled Products . . . 16
1.4.18 Unchanged Components in OES 2018 SP3 . . . 16
1.5 OES Entitlements . . . 16
1.6 Next Release Updates . . . 16
1.6.1 Apple Filing Protocol (AFP) Deprecation . . . 17
1.6.2 Service Proxy Deprecation . . . 17
1.6.3 ShadowFS Deprecation . . . 17
1.6.4 NetStorage Deprecation . . . 17

2 Service Issues 19

2.1 Apple Filing Protocol (AFP) . . . 19
2.1.1 Files and Folders with ZID Number Greater Than 32-bit Not Listed on Mac . . . 19
2.2 Client for Open Enterprise Server . . . 19
2.2.1 On Enabling NCP Encryption Disable Send File Support . . . 19
2.3 DNS/DHCP Services . . . 20
2.3.1 DHCP Pattern Conflict . . . 20

2.4 Domain Services for Windows (DSfW) 20
2.4.1 CIS Pattern Conflict in DSfW Name-Mapped/Non-Name-Mapped Servers. 20
2.4.2 Workaround for DSFW Name-Mapped Tree 20
2.4.3 Mixed Mode Configuration is not Supported 20
2.4.4 DSfW Interoperability Issues 21
2.5 eDirectory 21
2.5.1 eDirectory Features Not Supported in OES 21
2.5.2 eDirectory Not Restarting Automatically 21
2.6 Files and Folders 22
2.6.1 Attributes On a File and Folder Cannot Be Set While Using iManager. 22
2.7 iManager Standalone 22
2.7.1 Issues with OES 2018 SP3 Cluster Plugin 22
2.8 iPrint Advanced 22
2.8.1 Documents with SmartArt Graphics or Tables 22
2.9 NetWare Core Protocol (NCP). 22
2.9.1 On Enabling NCP Encryption Disable Send File Support 22
2.10 OES Storage Services (NSS) 22
2.10.1 Support for Mixed Cluster Nodes and NSS AES Media Upgrades 22
2.10.2 RAID 5 Issues 23
2.10.3 Move or Split Operation Not Supported on Existing Volumes for OES 2018 SP2 or Earlier Servers 23

A Deprecated Components and Services 25

MICRO FOCUS

Open Enterprise Server 2018 SP3

Release Notes

April 2022

Legal Notices

© Copyright 2022 Micro Focus or one of its affiliates.

The only warranties for products and services of Micro Focus and its affiliates and licensors (“Micro Focus”) are as may be set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Micro Focus shall not be liable for technical or editorial errors or omissions contained herein. The information contained herein is subject to change without notice.

About This Release Notes

Micro Focus Open Enterprise Server 2018 SP3 delivers all the enterprise-class networking, file, and print services that enterprises have relied on for years. OES 2018 SP3 is on SUSE Linux Enterprise 12 SP5, which provides valuable benefits including power savings, virtualization, manageability, and interoperability.

OES 2018 SP3 provides several new features that reduce administrative complexities and provides access to file and storage services regardless of eDirectory or Active Directory as an identity source. For information about the new features, see Chapter 1, "What's New or Changed in OES 2018 SP3," on page 7.

This Release Notes focuses on issues and information that are specific to the OES 2018 SP3 release.

Before installing this release, be sure to review the known issues, as described in "Service Issues" on page 19.

- Chapter 1, "What's New or Changed in OES 2018 SP3," on page 7
- Chapter 2, "Service Issues," on page 19
- Appendix A, "Deprecated Components and Services," on page 25

Additional Documentation

For more information about	See
Planning and implementing OES	OES 2018 SP3: Planning and Implementation Guide
Installing, Upgrading, and Updating an OES server	OES 2018 SP3: Installation Guide

Use the following links to access the earlier versions of OES documentation:

- NetWare 6.5 SP8 Online Documentation website
- OES 2 SP3 Online Documentation website
- OES 11 SP3 Online Documentation website
- OES 2015 SP1 Online Documentation website
- OES 2018 Online Documentation website

1 What's New or Changed in OES 2018 SP3

This section summarizes the new features and enhancements in Micro Focus Open Enterprise Server (OES) 2018 SP3 release and its patches.

- Section 1.1, "What's New or Changed in OES 2018 SP3 Update 3," on page 7
- Section 1.2, "What's New or Changed in OES 2018 SP3 Update 2," on page 7
- Section 1.3, "What's New or Changed in OES 2018 SP3 Update 1," on page 8
- Section 1.4, "What's New or Changed in OES 2018 SP3," on page 8
- Section 1.5, "OES Entitlements," on page 16
- Section 1.6, "Next Release Updates," on page 16

1.1 What's New or Changed in OES 2018 SP3 Update 3

1.1.1 Cloud Integrated Storage (CIS)

CIS Client

- **CIS Client for Windows:** The CIS client is upgraded to version 1.0.5 and includes changes to icons.
- **CIS Client for MAC:** The CIS client is upgraded to version 1.1.1 and includes changes to icons.

Elasticsearch

Security vulnerabilities are fixed for Elasticsearch. You must perform additional steps on applying the patch. For more information, see Patching OES 2018 SP3 Update 3 in OES 2018 SP3: CIS Administration Guide.

1.2 What's New or Changed in OES 2018 SP3 Update 2

1.2.1 Supported Versions of Bundled Products

OES 2018 SP3 supports the following upgraded products bundled with OES:

- NetIQ eDirectory 9.2.5
- Micro Focus iManager 3.2.5

1.2.2 Cloud Integrated Storage (CIS)

Docker Subnet Change Utility

This utility changes the cisnet docker subnet.

Two-Pass Migration

A new parameter TWO_PASS_MIGRATION is added to the `/etc/opt/novell/cisagent/config` file to perform DST migration in two phases to avoid CPU overload. For more information, see DST Migration From the Shadow Volume To Cloud Storage Causes High CPU Utilization in the OES 2018 SP3: CIS Administration Guide.

1.3 What's New or Changed in OES 2018 SP3 Update 1

1.3.1 iPrint

Support for Standalone With NSS Filesystem

In a Standalone environment, you can host iPrint on an NSS filesystem. For more information, see Configuring iPrint Advanced Server In a Standalone Environment

1.3.2 Migration Tool

The `[-d] or [--delete]` option is available for `migcred` command to delete the credentials of an identity with `migcred` command. For more information, see migcred.

1.3.3 Support Matrix Updates

Windows Client

iPrint client, CIS client, and NFARM client are available on Windows 11.

MAC Client

iPrint client, CIS client, and NFARM client are available on macOS Monterey.

1.4 What's New or Changed in OES 2018 SP3

- Section 1.4.1, "Install and Upgrade," on page 9
- Section 1.4.2, "OES Welcome Screen," on page 9
- Section 1.4.3, "TLS v1.2 Support," on page 9
- Section 1.4.4, "Product Improvement," on page 10

- Section 1.4.5, “Cloud Integrated Storage (CIS) - OES Dashboard,” on page 10
- Section 1.4.6, “Common Internet File System (CIFS),” on page 10
- Section 1.4.7, “Migration Tool,” on page 11
- Section 1.4.8, “NetWare Core Protocol (NCP),” on page 11
- Section 1.4.9, “Storage Services (NSS),” on page 12
- Section 1.4.10, “Distributed File Services (DFS),” on page 12
- Section 1.4.11, “OES File Access Rights Management (NFARM),” on page 12
- Section 1.4.12, “VLOG,” on page 13
- Section 1.4.13, “iPrint,” on page 13
- Section 1.4.14, “DNS / DHCP,” on page 14
- Section 1.4.15, “Domain Services for Windows (DSfW),” on page 14
- Section 1.4.16, “OES Cluster Services (NCS),” on page 15
- Section 1.4.17, “Supported Versions of Bundled Products,” on page 16
- Section 1.4.18, “Unchanged Components in OES 2018 SP3,” on page 16

This section summarizes the new features and enhancements in Micro Focus Open Enterprise Server (OES) 2018 SP3 release.

1.4.1 Install and Upgrade

UEFI Secure Boot Support

Beginning with OES 2018 SP3, OES can be installed on a UEFI enabled secure boot environment. The Micro Focus Secure Boot Certificates will be imported during the installation of OES with secure boot enabled. You are required to enroll the key in the UEFI prompt and follow the steps to add the certificates in the Machine Owner Keys (MOK) database. For more information, see Deploying OES 2018 SP3 in a UEFI Secure Boot Environment in the OES 2018 SP3: Installation Guide.

Product Improvement Consent Screen

A new screen to participate in the Product Improvement program is available on installing or upgrading to OES 2018 SP3. For more information, see Product Improvement in the OES 2018 SP3: Installation Guide.

1.4.2 OES Welcome Screen

The OES Welcome page is rebranded to reflect the Micro Focus style. The page now highlights the top features for the release along with few important links to resources, community forums, and so on.

1.4.3 TLS v1.2 Support

OES 2018 SP3 server supports TLS v1.2.

1.4.4 Product Improvement

The Product Improvement program enables Micro Focus to collect statistical data about your usage of services on the OES server. This data enables us to ensure that you have the best possible experience with the OES services. The data is sent weekly once to the Micro Focus server. For more information, see Product Improvement in the OES 2018 SP3: Planning and Implementation Guide.

A new screen to participate in this program is available on installing or upgrading to OES 2018 SP3.

1.4.5 Cloud Integrated Storage (CIS) - OES Dashboard

Provides a rich dashboard to monitor the health of all the servers (and its services) that are part of the agent search context in the same eDirectory tree. The CIS server contacts all these servers to provide a real-time health status. For more information, see OES Dashboard in the OES 2018 SP3: Planning and Implementation Guide.

1.4.6 Common Internet File System (CIFS)

Durable Handles

This feature allows client to continue using opened files even after a temporary connection loss. A durable handle is a special file handle (from SMB server perspective) that is preserved in case of client's temporary connection loss and allows them to continue file operations where it stopped once connectivity is restored.

Apple Time Machine Backups Data From NSS Volumes

Apple Time Machine (ATM) is a default application for backing up Mac clients data to local and network volumes. As part of this feature, Apple extensions (of the SMB protocol) are implemented to let ATM backup Mac client's data to the NSS volumes. For more information, see Apple Time Machine Backups to NSS Volumes in the OES 2018 SP3: OES CIFS for Linux Administration Guide.

novcifs Command Changes

- **Toggling between SMB Versions:** By default, the SMB v1 sessions are disabled and SMB v3 option is enabled.

  ```
  --dialect=SMB|SMB2|SMB3
  ```

  ```
  --disable-smbv1-sessions=all
  ```

- **Display of Shares Depending on Trustees:** Enables or disables the display of shares depending on the trustee rights of the user or group.

  ```
  --check-share-visibility-rights=yes|no
  ```

- **Directory Leasing:** Enables or disables directory leasing for SMB 3.0 or later connections. Directory leasing enables clients to cache the meta data of directories and thereby improves the overall performance.

  `--directory-leasing=yes|no`

- **Apple Time Machine Backup:** Enables or disables share to be Apple Time Machine (ATM) backup target. Enable this option to let ATM running on the Mac clients to backup their data to the specified share.

  `--atm-backup=yes|no`

1.4.7 Migration Tool

File System Migration Commands

The `--use-casa` option is available to store and retrieve usernames and passwords from the OES Credential Store. For more information, see File System Migration Commands in the OES 2018 SP3: Migration Tool Administration Guide.

1.4.8 NetWare Core Protocol (NCP)

Beginning with OES 2018 SP3, the `ncpcon` commands supports BASH auto completion.

Encryption Performance Improvement

CPU affinity is applied to SSG threads in NCP Server for improving the encryption performance. By default, encryption at server level is enabled. For more information, see Managing NCP Threads in the OES 2018 SP3: NCP Server for Linux Administration Guide.

Changes to Replicate_Primary_Tree_To_Shadow Option

The REPLICATE_PRIMARY_TREE_TO_SHADOW option is enabled by default in OES 2018 SP3. When this option is enabled, the primary volume directory tree structure gets replicated to the shadow volume directory tree when an existing NSS volume is configured as primary volume for DST. For more information, see Dynamic Storage Technology for NCP Server in the OES 2018 SP3: NCP Server for Linux Administration Guide.

Support for NCP Encryption and Multi Factor Authentication is enhanced

- You can now enforce encryption and MFA at volume/cluster volume level or path level on the NCP server. For more information, see Managing NCP Security Configurations in the OES 2018 SP3: NCP Server for Linux Administration Guide.
- Two error codes ‘103 (0x67)’ and ‘104 (0x68)’ are introduced for Encryption and MFA enforcement. For more information, see Managing NCP Security Configurations in the OES 2018 SP3: NCP Server for Linux Administration Guide.

1.4.9 Storage Services (NSS)

Thin Provisioning Enhancements

Auto Discard: This feature discards the unused blocks automatically that are released by the pool. This functionality is supported on pools that reside completely on thin provisioned storage. This avoids user intervention to discard the unused blocks by executing the `fstrim` command.

The `nss`, `nsscon`, and `nlvm` utilities are updated with a new option `(No)AutoDiscard` to enable or disable the autodiscard feature for a given pool.

Device Agnostic: OES supports thin provisioning features (Fstrim, Auto Discard, and Blk_discard_on_delete) on all types of storage device drivers. The certified virtualized platforms by us are VMware, XEN, and KVM.

NSS Utilities Enhancements

The following NSS utilities are enhanced to include --dst and --no-dst options:

- rights
- attrib
- nssquota
- nsschown

For more information, see man page of the corresponding utility.

Linux Utilities Enhanced to Support DST

The Linux utilities - `mkdir`, `rmdir` and `mv` are enhanced to support DST. Any operation performed on a directory in the Primary volume is replicated on the shadow volumes for these utilities.

1.4.10 Distributed File Services (DFS)

Use an Existing Volume When Moving or Splitting Data: An existing volume can be selected when performing a Move or Split operation. For more information, see Moving an NSS Volume with DFS and Splitting a Volume with DFS in the OES 2018 SP3: Distributed File Services Administration Guide for Linux.

1.4.11 OES File Access Rights Management (NFARM)

NFARM for MAC

Manage eDirectory or Active Directory Trustees: When you map the volume as an eDirectory user, then to manage AD trustees, select the option **List Active Directory trustees also** in the **Settings** tab. Similarly, when you map the volume as an AD user, then to manage eDirectory trustees, select the option **List eDirectory trustees also** in the **Settings** tab. For more information see, Settings (Mac) in the OES 2018 SP3: NSS AD Administration Guide.

Complete Trustee Management Support for eDirectory Users: An eDirectory user can manage trustee rights, file system rights, directory quota, and user quota (remove quota). To perform trustee management, you must be an eDirectory administrator or a user who has administrative privileges.

Multi forest Support for AD users: Previously NFARM for MAC supported only single forest. Now it supports multi-forest browsing to choose an AD users for trustee management. A user can choose the required domain from the list of available domains.

NFARM Client for MAC

NFARM client for macOS Universal App supports both Intel and Apple silicon based macOS Big Sur.

NFARM for Windows

Add eDirectory or Active Directory Trustees: When you map the volume as an eDirectory user, then you can add AD trustees by selecting the option **List Active Directory trustees also**. Similarly, when you map the volume as an AD user, then you can add eDirectory trustees too.

For more information, see NFARM (OES File Access Rights Management) in the OES 2018 SP3: NSS AD Administration Guide.

Salvage Utility for Windows

The Salvage utility for Windows is updated with new options as follows:

Filter and **Clear Filter** to set and clear attributes to display the salvaged data.

Recursive to salvage all data from folders and subfolders.

For more information, see Salvage and Purge on Windows in the OES 2018 SP3: OES CIFS for Linux Administration Guide.

1.4.12 VLOG

vlog command change

Trigger File Extension: Specify an extension for the trigger files. By default, the CEF format displays the extension as cef_ready. The other formats will not have any extension.

`-t or --triggerFileExtension`

1.4.13 iPrint

Support for Azure AD Integration

iPrint users can now be authenticated by using Microsoft Identity platform for secure iPrint printers. This functionality is available with Desktop printing (Windows), QuickPrint, Release Portal, and Context Menu-based Desktop Printing too. For more information, see Identity Sources in the OES 2018 SP3: iPrint Advanced Administration Guide.

CUPS Service

A new service file `iprint-cups.service` is added to start the cups binary on iPrint Advanced server with `cupsd-iprint.conf` (iPrint configuration file) file.

The CUPS file (`cups.service`) available with the earlier release is masked and should not be used with the OES 2018 SP3 server.

iPrint Client 6.22.10 for Windows

The iPrint Client is upgraded to version 6.22.10 and allows Azure users to print to iPrint secure printers.

iPrint Client 6.15 for Mac

The iPrint Client is upgraded to version 6.15 and supports macOS Big Sur (Intel and Apple M1 architecture).

1.4.14 DNS / DHCP

Install JC via MSI

DNS-DHCP management console is packaged as Microsoft installers for Windows 64 and 32 bit machines and can be managed using Programs and Features in Windows systems. DNS-DHCP management console is enhanced with Auto-populate feature for login dialog. The feature pulls past users corresponding to Server IP for login.

1.4.15 Domain Services for Windows (DSfW)

DSfW Integration with Filr

DSfW supports Filr integration. When DSfW and Filr are synchronized, DSfW users can access Filr services. DSfW server provides backend authentication and storage with three methods:

- NSS AD as the storage backend for DSfW and Filr
- Windows as the storage backend for DSfW and Filr
- NetApp as the storage backend for DSfW and Filr

Different types of Filr deployment such as small deployment, large deployment, and expandable deployment can synchronize with DSfW servers, NetApp and NSS AD as a storage backend.

DSfW Integration with NetIQ Advanced Authentication

DSfW supports Multi Factor Authentication (MFA) capabilities by integrating with NetIQ's Advanced Authentication. This provides more security to the workstations, which are joined to DSfW domain. MFA is supported with Windows and MAC workstations.

novell-oes-samba Stack Update

The novell-oes-samba stack in OES 2018 SP2 was on Samba 4.6. In this release, the two versions are aligned by updating novell-oes-samba to 4.10 version. The protocol stack remains as SMB 2.

Schema Update

DSfW offers updated schema level as Microsoft Windows Server 2019. There is no functional level change in Windows server 2019 nor in DSfW.

Enhancement of Healthcheck Script and Integration to supportconfig on DSfW Servers

Added more checks based on regular encountered customer issues. OES 2018S P3 checks include sites and subnet, strict check of ndsd ports like UDP over 389 and 636, and if correct nmas-methods are deployed. smb.conf file is also validated for new parameters. Subset of the script is also integrated to supportconfig tool. The link to download Healthcheck script is OES Tips and Information.

Third Party Support

DSfW now supports domain join and file access for NetApp ONTAP 9.9.1.

1.4.16 OES Cluster Services (NCS)

Cluster Script Limit Increased to 1 MB

The Load, Unload, and Monitor cluster script limit is increased from 3200 bytes to 1 MB. A maximum of 1 MB is supported if the cluster is homogeneous with all the nodes on OES 2018 SP3. In a mixed node cluster with at least one node on a version lower than OES 2018 SP3, the script length will be restricted to 3200 bytes/3.2KB. See Script Length Limits in the OES 2018 SP3: OES Cluster Services for Linux Administration Guide.

SBD `Utility` Command Changes

The following options are added to the SBD util command line. For more information on each of the options, see the SBD `Utility` man page.

- `sbdutil -Z`: Use the entire device while creating a partition.
- `sbdutil -I`: Initializes the entire SBD partition.
- `sbdutil -i`: Initialize the SBD partition except the cluster event logs.
- `sbdutil -E`: Backup the event logs.
- `sbdutil -v`: View the used slots on the SBD partition.
- `sbdutil -E -k`: Export the backed up cluster event logs in a raw format.
- `sbdutil -m`: Restore the back up cluster event logs to a newly created SBD partition.
- `sbdutil -r -x`: Export the logs in XML format.
- `sbdutil -r -j`: Export the logs in json format.
- `sbdutil -r -u`: Export the logs in CSV format.

Log Files

The `logrotate` service is enabled to archive cluster `monitor.out` logs. The `monitor.out` files are compressed and saved in the system for 365 days. For more information, see Log Filesin the OES 2018 SP3: OES Cluster Services for Linux Administration Guide.

Cluster Enabled NSS Resource Migration Improvement

NSS resource migration in cluster is improved by the enhancement made in pool and volume deactivation. This reduces the time taken for cluster NSS resource migration.

Cluster Command Changes

maintenance < on | off > <expiry_time>: An expiry time can be set to automatically turn off the cluster maintenance mode. For more information, see the `cluster` man page.

```
cluster maintenance <on|off> <expiry_time>
```

1.4.17 Supported Versions of Bundled Products

OES 2018 SP3 supports the following upgraded products bundled with OES:

- NetIQ eDirectory 9.2.4
- Micro Focus iManager 3.2.4

1.4.18 Unchanged Components in OES 2018 SP3

Besides bug fixes, there are no other changes to the following components for OES 2018 SP3:

- Apple Filing Protocol (AFP)
- Business Continuity Clustering (BCC)
- Linux User Management (LUM)
- NetStorage
- OES FTP
- Storage Management Services (SMS)

1.5 OES Entitlements

The following are the entitlement to all OES customers under maintenance:

- Filr Standard
- iPrint Desktop (Appliance)
- iPrint Advanced (Except mobile printing)
- Cluster services 2 node entitlement
- IDM Bundle Edition
- NetIQ Self Service Password Reset as an indirect entitlement via their IDM BE entitlement
- Advanced Authentication Limited Edition

1.6 Next Release Updates

- Section 1.6.1, “Apple Filing Protocol (AFP) Deprecation,” on page 17
- Section 1.6.2, “Service Proxy Deprecation,” on page 17
- Section 1.6.3, “ShadowFS Deprecation,” on page 17
- Section 1.6.4, “NetStorage Deprecation,” on page 17

1.6.1 Apple Filing Protocol (AFP) Deprecation

AFP is being deprecated on a new server and will not be supported in the future releases. Micro Focus offers OES CIFS as an alternative to AFP.

1.6.2 Service Proxy Deprecation

Service Proxy is being deprecated on a new server in favor of common-proxy and will not be supported in the future releases. If any service is configured with service-specific proxy users in the earlier versions of OES, then an upgrade to the OES 2018 SP1 or later server moves the service to use a common proxy user.

1.6.3 ShadowFS Deprecation

ShadowFS uses FUSE to create a local mount point for merged view of each DST shadow volume pair. The ShadowFS support is being deprecated and will not be supported in future releases. Use CIS or DST with OES CIFS or NCP as an alternative to ShadowFS.

If you are using or taking advantage of ShadowFS, then request you to email us at oes@microfocus.com

1.6.4 NetStorage Deprecation

NetStorage is being deprecated and will not be supported in the future releases. Micro Focus offers Filr as an alternative to NetStorage. Although, Filr is a separate product, its Standard version is offered as an entitlement to OES customers. For more information about Filr, see Filr Overview (https://www.microfocus.com/en-us/products/filr/overview).

2 Service Issues

This section documents the known issues in Open Enterprise Server 2018 SP3 (OES 2018 SP3).

Additional tips are found in the troubleshooting sections of the OES service administration guides.

- Section 2.1, “Apple Filing Protocol (AFP),” on page 19
- Section 2.2, “Client for Open Enterprise Server,” on page 19
- Section 2.3, “DNS/DHCP Services,” on page 20
- Section 2.4, “Domain Services for Windows (DSfW),” on page 20
- Section 2.5, “eDirectory,” on page 21
- Section 2.6, “Files and Folders,” on page 22
- Section 2.7, “iManager Standalone,” on page 22
- Section 2.8, “iPrint Advanced,” on page 22
- Section 2.9, “NetWare Core Protocol (NCP),” on page 22
- Section 2.10, “OES Storage Services (NSS),” on page 22

2.1 Apple Filing Protocol (AFP)

2.1.1 Files and Folders with ZID Number Greater Than 32-bit Not Listed on Mac

On Mac, the NSS files and folders with ZID numbers greater than 32-bit are not listed when the NSS volume is mapped through AFP.

2.2 Client for Open Enterprise Server

2.2.1 On Enabling NCP Encryption Disable Send File Support

The send file support is not available when NCP encryption is set to `enable` or `enforce`. So ensure to set `SENDFILE_SUPPORT=0`, else the file and folder copy operations fail between:

- The mapped drives
- The mapped drives and local machine and vice versa

2.3 DNS/DHCP Services

2.3.1 DHCP Pattern Conflict

When you select DHCP pattern post installation, a pattern conflict message is displayed. To continue, select the first option.

```
1. Following actions will be done.
install novell-oes-dhcp-4.3.3_OES-3.68.x86_64 (with vendor change)
 SUSE LLC <https://www.suse.com/>  -->  Novell, Inc.
install novell-oes-dhcp-relay-4.3.3_OES-3.68.x86_64 (with vendor change)
 SUSE LLC <https://www.suse.com/>  -->  Novell, Inc.
install novell-oes-dhcp-server-4.3.3_OES-3.68.x86_64 (with vendor change)
 SUSE LLC <https://www.suse.com/>  -->  Novell, Inc.
 deinstallation of dhcp-client-4.3.3-10.14.1.x86_64
```

2.4 Domain Services for Windows (DSfW)

- Section 2.4.1, “CIS Pattern Conflict in DSfW Name-Mapped/Non-Name-Mapped Servers,” on page 20
- Section 2.4.2, “Workaround for DSFW Name-Mapped Tree,” on page 20
- Section 2.4.3, “Mixed Mode Configuration is not Supported,” on page 20
- Section 2.4.4, “DSfW Interoperability Issues,” on page 21

2.4.1 CIS Pattern Conflict in DSfW Name-Mapped/Non-Name-Mapped Servers

CIS pattern cannot be installed on Name-Mapped and Non-Name-Mapped DSfW servers.

2.4.2 Workaround for DSFW Name-Mapped Tree

On a Name-Mapped deployment, CIS is installed on the eDirectory server and DSfW is installed on a partitioned container. Dashboard is not able to fetch DSfW server details since CIS and DSfW are in different domains.

Workaround: DSfW domain DNS is added as a primary DNS in the eDirectory server where CIS is installed. With this change CIS resolves DSfW domain and started fetching DSFW server details.

2.4.3 Mixed Mode Configuration is not Supported

Beginning with OES 2018 SP1, the DSfW domain controllers having OES 2018 SP1 or later and those having earlier OES versions cannot coexist in a forest. This is because of the functional incompatibility between the updated Kerberos version in OES 2018 SP1 and the Kerberos version in OES 2018 and earlier. All the DSfW servers in a forest must be on the same OES version and on the same patch level.

2.4.4 DSfW Interoperability Issues

IMPORTANT: The following list is provided for your convenience. Do not consider the list as complete. Be sure to consult the documentation for your other Micro Focus products for information on interoperability issues with DSfW.

ZENworks Endpoint Security Management 3.5

On an OES 2018 server with DSfW installed, the Endpoint Security Management utility fails on all DSfW server ports.

Micro Focus has no current plans to change this.

2.5 eDirectory

The following are the known OES-specific eDirectory issues. For general eDirectory issues, refer to the eDirectory documentation website.

- Section 2.5.1, “eDirectory Features Not Supported in OES,” on page 21
- Section 2.5.2, “eDirectory Not Restarting Automatically,” on page 21

2.5.1 eDirectory Features Not Supported in OES

The following eDirectory features are not supported:

- SUITE B

  For more information, see Configuring eDirectory in Suite B Mode in the NetIQ eDirectory Administration Guide.
- Enhanced Background Authentication (EBA)
- FIPS

NOTE: With OES 2018 SP1 or earlier, along with these eDirectory features, creation of AES 128-bit tree key or 256-bit tree key is also not supported.

2.5.2 eDirectory Not Restarting Automatically

After a system crash or power failure, eDirectory services (ndsd) might not automatically start in some situations.

To start eDirectory again:

1. Delete the `/var/opt/novell/eDirectory/data/ndsd.pid` file.
2. At a terminal prompt, enter `systemctl start ndsd.service`

2.6 Files and Folders

2.6.1 Attributes On a File and Folder Cannot Be Set While Using iManager.

When using iManager > **Files and Folders**, you cannot set or change the attributes on a file or folder. However, you can use the NSS `attrib` utility to set or modify the attributes on a file or folder.

2.7 iManager Standalone

2.7.1 Issues with OES 2018 SP3 Cluster Plugin

If you are using a standalone iManager workstation, it is recommended not to upgrade to OES 2018 SP3 cluster plugin (`ncsmgmt.npm`). cluster plugin. There are a few issues with the latest cluster plugin such as missing buttons and empty tabs.

2.8 iPrint Advanced

2.8.1 Documents with SmartArt Graphics or Tables

Printing documents with SmartArt graphics or tables may impact the quality of the printout. It is recommended to test the quality of printouts before deploying in a production environment.

2.9 NetWare Core Protocol (NCP)

2.9.1 On Enabling NCP Encryption Disable Send File Support

The send file support is not available when NCP encryption is set to `enable` or `enforce`. So any setting to `SENDFILE_SUPPORT` is ineffective when encryption is set to `enable` or `enforce`.

2.10 OES Storage Services (NSS)

- Section 2.10.1, “Support for Mixed Cluster Nodes and NSS AES Media Upgrades,” on page 22
- Section 2.10.2, “RAID 5 Issues,” on page 23
- Section 2.10.3, “Move or Split Operation Not Supported on Existing Volumes for OES 2018 SP2 or Earlier Servers,” on page 23

2.10.1 Support for Mixed Cluster Nodes and NSS AES Media Upgrades

In a mixed node cluster environment, before upgrading the NSS media to support AES, it is strongly recommended that you upgrade all the nodes to OES 2018 SP2. This is because the upgraded NSS resources might not be accessible from cluster nodes that are not upgraded to OES 2018 SP2.

2.10.2 RAID 5 Issues

Some issues can occur when you lose a device in an NSS software RAID 5 device, or when you expand an NSS software RAID 5 device. The following issues happen intermittently:

When a segment is missing in an NSS RAID 5 because of a device failure, the pool might hang until the device driver reports the error, and then the RAID continues. The hang time depends on the underlying device driver timeout conditions. For iSCSI devices, this includes iSCSI driver timeout. For extended hangs, the pool might also get deactivated.

2.10.3 Move or Split Operation Not Supported on Existing Volumes for OES 2018 SP2 or Earlier Servers

Selecting an existing volume to perform Move or Split operation is supported on OES 2018 SP3 or later servers. This functionality (existing volume) is not supported with OES 2018 SP2 or earlier servers.

A Deprecated Components and Services

- **Novell Samba**

  Beginning with OES 2018 SP1, Novell Samba is deprecated. New installations of OES 2018 SP1 will not include pattern to install Novell Samba.

  If you are upgrading to OES 2018 SP1 from an earlier OES version that includes Novell Samba, the package and configuration will be removed during the upgrade process. It is recommended to install and use Novell CIFS to access the data that was earlier accessed from Samba shares. For more information, see Understanding the Implications of Novell Samba Currently Installed on the Server in the OES 2018 SP3: Installation Guide.

  The iManager plug-in for Novell Samba is still available post upgrade to manage the DSfW shares.

- **iFolder**

  Beginning with OES 2018, iFolder is deprecated. New installations of OES 2018 will not include pattern to install iFolder.

  If you are upgrading to OES 2018 or later from an OES 2015 SP1 or earlier server that includes iFolder, the package will not be accessible on the OES 2018 or later server. However, the iManager plug-in is still available post upgrade, and you can use them to manage servers prior to OES 2018.

- **Archive and Version Service (AV) and QuickFinder**

  Beginning with OES 2015, Archive and Version Services (AV) and QuickFinder services are deprecated. New installations or upgrade to OES 2015 and later will not include patterns to install these components.

  If you are upgrading to OES 2015 or later from an OES 11 SP3 or earlier server that includes the Archive and Versioning Services (AV) and QuickFinder, these packages and the associated data will not be accessible on the OES 2015 or later server. However, the iManager plug-ins for AV and QuickFinder are still available post upgrade to OES 2015, OES 2015 SP1, or OES 2018 and you can use them to manage servers prior to OES 2015.

  Beginning with OES 2018 SP1, the iManager plug-ins for AV and QuickFinder are obsolete.